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# Valvular Heart Disease

## CLINICAL IMPACT AND PROGNOSIS OF PULMONARY HYPERTENSION AFTER TRANSCATHETER AORTIC VALVE IMPLANTATION FOR SEVERE AND SYMPTOMATIC AORTIC STENOSIS

ACC Moderated Poster Contributions
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Session Title: TAVR: Real World Outcomes and Potential Complications
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**Background:** Transcatheter aortic valve implantation (TAVI) is a therapeutic option for patients presenting with severe aortic stenosis and in whom surgery is contraindicated. Preprocedural pulmonary hypertension (PH) has been shown to be a factor of poor prognosis in surgical and TAVI studies. We sought to evaluate the clinical impact and prognostic implications of the presence of post-TAVI PH.

**Methods:** Evolution of post-TAVI pulmonary artery systolic pressure (PASP) was studied in 58 patients with severe aortic stenosis by assessing clinical presentation and prognosis and determining predictive factors.

**Results:** Despite excellent aortic results in both groups, patients with post-TAVI PH (PASP>40mmHg) were more symptomatic with severer NYHA class, higher cardiovascular mortality and more frequent readmission for cardiac failure and required intensified medical treatment. On univariate analysis, factors for elevated PASP were female sex, history of myocardial infarction, pacemaker implantation and permanent pacing, atrial fibrillation and degree of mitral regurgitation. On multivariate analysis, only atrial fibrillation remained an independent factor for post-TAVI PH.

**Conclusion:** PH is frequently present after TAVI and allows identification of a subgroup of patients with poorer clinical presentation and cardiovascular prognosis. Further studies, and especially complementary myocardial investigation, seem necessary in order to explore the role of myocardial fibrosis.